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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/646,430	08/22/2003	Brandon Stuart Burroughs	UTL00329	9170

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EXAMINER	
PIZIALI, JEFFREY J	
ART UNIT	**PAPER NUMBER**
2629	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/19/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/646,430	BURROUGHS, BRANDON STUART	
	Examiner	Art Unit	
	Jeff Piziali	2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 March 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) *3 and 12* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,4-11 and 13-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *22 August 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed (on 28 March 2007) in this application after final rejection (mailed 8 February 2007). Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 28 March 2007 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1, 2, 4-11, and 13-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over ***Meringer (US 2003/0002007 A1)*** in view of ***Griffin et al (US 6873317 B1)***.

Regarding claim 1, Meringer discloses a keyboard for a handheld electronic device (see Paragraph 4), the keyboard configured for use with thumbs of a user (i.e. "Thumb Typing") and comprising: a left set of one or more rows of input keys [Fig. 1; 1] and a right set of one or more rows of input keys [Fig. 1; 3] separated by a centerline [Fig. 1; vertical line through center of

display 2], the left set of one or more rows of input keys arranged in one or more respective arcs having one or more respective arc centers located to the left of the centerline, and the right set of one or more rows of input keys arranged in one or more respective arcs having one or more respective arc centers located to the right of the centerline (see Fig. 1; Paragraphs 12-13).

Meringer generally teaches using round keypads, and does not expressly disclose incorporating a rectangular numeric keypad. However, Griffin does teach replacing a round keypad (see Figs. 7-8) with a substantially rectangular numeric keypad [Figs. 9-10; square shaped keypads "T, Y" which also allow entry of numbers "5, 6", for example] including a plurality of phone number input keys [Figs. 9-10; wherein square shaped input keys 5 & 6 allow entry of telephone numbers] arranged in a rectangular configuration [Figs. 9-10; wherein keys 5 & 6 are arranged side-by-side in a configuration which could be encircled by a rectangle] for entering phone numbers centered below [wherein Figs. 9 & 10 are illustrated upside down], and distinct from [wherein both Meringer and Griffin teach each of their keys being separate and distinct from the surrounding other keys], left and right sets of one or more rows of input keys (see Column 9, Lines 7-18).

Meringer and Griffin are analogous art, because they are both from the shared field of arced keyboards facilitating thumb-typing. Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention to substitute Griffin's rectangular dual letter/number entry styled keypads in the place of Meringer's round keypads (resulting in the centermost numeric keypads being positioned below the outermost numeric keypads), so as to make use of an alternate, standard keyboard layout that is comfortable for the user, enabling efficient and user-friendly data entry (see Griffin, Column 4, Lines 18-21).

Regarding claim 2, Meringer discloses a QWERTY keyboard layout (see Fig. 1; Paragraph 12).

Regarding claim 4, Meringer discloses the one or more respective arc centers of the left set of one or more rows of input keys are concentric and the one or more respective arc centers of the right set of one or more rows of input keys are concentric (see Fig. 1; Paragraph 13).

Regarding claim 5, Meringer discloses the one or more respective arc centers of the left set of one or more rows of input keys are collinear and the one or more respective arc centers of the right set of one or more rows of input keys are collinear (see Fig. 1; Paragraph 13).

Regarding claim 6, this claim is rejected by the reasoning applied in rejecting claim 5; furthermore, Meringer discloses the one or more respective arc centers of the left set of one or more rows of input keys are collinear and located in at least one of a vertical line and a horizontal line and the one or more respective arc centers of the right set of one or more rows of input keys are collinear and located in at least one of a vertical line and a horizontal line (see Fig. 1; Paragraph 13).

Regarding claim 7, Meringer discloses the respective arcs of the left set of one or more rows of input keys and the respective arcs of the right set of one or more rows of input keys include radii of curvature between 10 mm and infinity (see Fig. 1; Paragraph 13).

Regarding claim 8, Meringer discloses the arcs of the left set of one or more rows of input keys and the arcs of the right set of one or more rows of input keys form respective angles between 0 and 90 degrees with respect to the centerline (see Fig. 1; Paragraphs 4 and 13).

Regarding claim 9, Meringer discloses each row of the one or more rows of each set include a left-most input key [Fig. 1; Q] and a right-most input key [Fig. 1; P], the left set of one or more rows are opposite the right set of one or more rows (see Paragraph 15), and lines drawn through the left-most input key and the right most input key of opposite rows intersect the centerline to form a V shape (see Fig. 1).

Regarding claim 10, this claim is rejected by the reasoning applied in rejecting claims 1 and 9.

Regarding claim 11, this claim is rejected by the reasoning applied in rejecting claim 2.

Regarding claim 13, this claim is rejected by the reasoning applied in rejecting claim 8.

Regarding claim 14, this claim is rejected by the reasoning applied in rejecting claim 1.

Regarding claim 15, this claim is rejected by the reasoning applied in rejecting claim 7.

Regarding claim 16, this claim is rejected by the reasoning applied in rejecting claims 1 and 9; furthermore, Meringer discloses providing a thumb keyboard (see Paragraph 4); using

only the left thumb to input information into the handheld electronic device using the left set of one or more rows of input keys; using only the right thumb to input information into the handheld electronic device using the right set of one or more rows of input keys (see Fig. 1; and Claim 1 on Page 2).

Regarding claim 17, this claim is rejected by the reasoning applied in rejecting claim 2.

Regarding claim 18, this claim is rejected by the reasoning applied in rejecting claim 8.

Regarding claim 19, this claim is rejected by the reasoning applied in rejecting claim 1.

Regarding claim 20, this claim is rejected by the reasoning applied in rejecting claim 7.

Response to Arguments

4. Applicant's arguments filed 28 March 2007 have been fully considered but they are not persuasive.

The applicant contends the cited prior art of ***Meringer (US 2003/0002007 A1)*** in view of ***Griffin et al (US 6873317 B1)*** neglects teaching the newly added subject matter of, a "substantially rectangular numeric keypad includ[ing] a plurality of phone number input keys arranged in a rectangular configuration for entering phone numbers centered below, and distinct from, the left and right sets of one or more rows of input keys" (see Page 7 of the 'Request for Continued Examination, Amendment and Response to Final Rejection' filed 28 March 2007). However, the examiner respectfully disagrees.

Meringer generally teaches using round keypads(see Fig. 1; Paragraphs 12-13), and does not expressly disclose incorporating a rectangular numeric keypad.

However, Griffin does teach replacing a round keypad (see Figs. 7-8) with a substantially rectangular numeric keypad [Figs. 9-10; square shaped keypads "T, Y" which also allow entry of numbers "5, 6", for example] including a plurality of phone number input keys [Figs. 9-10; wherein square shaped input keys 5 & 6 allow entry of telephone numbers] arranged in a rectangular configuration [Figs. 9-10; wherein keys 5 & 6 are arranged side-by-side in a configuration which is containable within a rectangle] for entering phone numbers centered below [wherein Figs. 9 & 10 are illustrated upside down], and distinct from [wherein both Meringer and Griffin teach each of their disclosed keys being separate, distinct and independent from the surrounding other keys], left and right sets of one or more rows of input keys (see Column 9, Lines 7-18).

By such reasoning, rejection of the claims is deemed necessary, proper, and thereby maintained at this time.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeff Piziali whose telephone number is (571) 272-7678. The examiner can normally be reached on Monday - Friday (6:30AM - 3PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached on (571) 272-7681. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jeff Piziali
13 April 2007